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BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

IN THE MATTER OF THE APPLICATION OF QUESTAR GAS COMPANY TO INCREASE DISTRIBUTION RATES AND CHARGES AND MAKE TARIFF MODIFICATIONS	**Docket No. 13-057-05**

PREFILED DIRECT TESTIMONY OF NEAL TOWNSEND

The UAE Intervention Group (UAE) and Nucor Steel-Utah (Nucor) hereby submit the Prefiled Direct Testimony of Neal Townsend.

DATED this 30th day of October, 2013.

/s/_____

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing was served by email this 30th day of October, 2013, on the following:

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BEFORE

THE PUBLIC SERVICE COMMISSION OF UTAH

Direct Testimony of Neal Townsend

on behalf of

UAE and Nucor

Docket No. 13-057-05

October 30, 2013

DIRECT TESTIMONY OF NEAL TOWNSEND

INTRODUCTION

Q. Please state your name and business address.

A. My name is Neal Townsend. My business address is 215 South State Street, Suite 200, Salt Lake City, Utah, 84111.

Q. By whom are you employed and in what capacity?

A. I am a Director for Energy Strategies, LLC. Energy Strategies is a private consulting firm specializing in economic and policy analysis applicable to energy production, transportation, and consumption.

Q. On whose behalf are you testifying in this proceeding?

A. My testimony is being sponsored by the Utah Association of Energy Users Intervention Group ("UAE") and Nucor Steel-Utah ("Nucor").

Q. Please describe your professional experience and qualifications.

A. I have provided regulatory and technical support on a variety of energy projects at Energy Strategies since I joined the firm in 2001. Prior to my employment at Energy Strategies, I was employed by the Utah Division of Public Utilities as a Rate Analyst from 1998 to 2001. I have also worked in the aerospace, oil and natural gas industries.

Q. Have you previously testified before this Commission?

A. Yes. Since 1997, I have testified in ten dockets before the Utah Public Service Commission on electricity and natural gas matters.

Q. Have you previously testified before any other state utility regulatory commissions?

A. Yes. I have testified in utility regulatory proceedings before the Arkansas Public Service Commission, the Illinois Commerce Commission, the Indiana Utility Regulatory Commission, the Kentucky Public Service Commission, the Michigan Public Service Commission, the Public Utilities Commission of Ohio, the Public Utility Commission of Oregon, the Public Utility Commission of Texas, the Virginia Corporation Commission, and the Public Service Commission of West Virginia. A more detailed description of my qualifications is contained in Attachment A, attached to this testimony.

OVERVIEW AND CONCLUSIONS

Q. What is the purpose of your testimony in this proceeding?

A. My testimony responds to Questar Gas Company's (QGC's or Company's) class cost-of-service study, QGC's proposed rate spread at its requested revenue increase, and the call option related to interruptible gas supplies. The absence of comment on my part regarding other issues does not signify support for (or opposition to) the Company's filing with respect to the non-discussed issues.

Q. Please summarize your conclusions and recommendations.

A. My testimony offers the following recommendations:

1. The throughput weighting for Allocation Factor 230 in QGC's cost-of-service study should be based on the system load factor.
2. In the interest of gradualism, I recommend that the increases for the IS, TS, and FT-1 classes be capped at 200% of the overall increase.
3. The tariff provisions which grant QGC the right to purchase interrupted volumes should be eliminated, because QGC claims that this call option right no longer holds any value, and has removed this valuation from its cost-of-service study.

CLASS COST-OF-SERVICE STUDY

Q. What is the purpose of conducting class cost-of-service analysis?

A. Class cost-of-service analysis is conducted to assist in the determination of appropriate rates for each customer class. The analysis involves the assignment of revenues, expenses, and rate base to each customer class. Through this process, each class is allocated a share of responsibility for the utility's costs, and the revenue change needed for each customer class to produce an equalized rate of return is identified.

Q. What class cost-of-service information is presented by QGC?

A. The Company's class cost-of-service results are presented in the direct testimony of QGC witness Austin C. Summers. The Company also made its cost-of-service model available to the parties in the case.

Q. Do you have any comments on the cost-of-service analysis presented by the Company?

A. Yes. I concur with many aspects of the Company's analysis, in particular, the Company's proposal to not assign peak demand responsibility to interruptible customers. I agree with Mr. Summers' reasoning that interruptible load will be curtailed in an actual peak day event, and therefore, should not be assigned peak demand responsibility. However, I disagree with certain components of the Company's cost-of-service analysis. Specifically, I disagree with the weightings used for Allocation Factor 230, which is used to allocate the compressor station, feeder system, and measurement and regulating station costs.

Q. What is Allocation Factor 230?

A. Allocation Factor 230 is described on page 1 of QGC Exhibit 4.2. This factor is used for allocating the compressor station and feeder system costs. In this case, QGC has also used this factor to allocate the measurement and regulating station costs. Allocation Factor 230 is designed to be a weighted blend of peak-day and throughput factors, presumably because these facilities are viewed as providing both peak-day and throughput-related services. The weighting proposed by QGC for Allocation Factor 230 is 60% peak-day and 40% throughput.

Q. What is your disagreement regarding the weightings used for Allocation Factor 230?

A. Allocating costs for particular facilities on both a peak basis and a throughput basis is an application of a methodology generally referred to as the

"Average and Peak" method.[1] In using the Average and Peak method, the weighting assigned to the throughput component should be no greater than the system load factor.[2] This is because the throughput, or "average", component is intended to allocate costs that are associated with base-load-type usage, and system load factor is a generally-accepted standard for measuring the portion of facilities associated with provision of base load service.

The 40% weighting assigned by QGC to throughput in the composition of Allocation Factor 230 exceeds QGC's load factor and thus overstates the reasonable assignment of cost responsibility to throughput. The 40% weighting proposed by QGC is not tied to any system utilization metric, and is purely judgmental. In response to discovery, QGC indicated its system load factor is approximately 33%.[3]

Q. What alternative do you recommend to the Commission?

A. I recommend that the throughput weighting for Allocation Factor 230 be based on QGC's system load factor of 33%. This produces a weighting for Allocation Factor 230 of 67% peak/ 33% throughput. This weighting is more consistent with the proper application of the Average and Peak method.

Q. Have you applied your recommended 67% peak/ 33% throughput weighting elsewhere in the Company's cost-of-service study?

[1] The term "Average" in "Average and Peak" refers to average use, and this component is allocated to classes on the basis of Throughput (Factor 220 in QGC's cost-of-service study). The "Peak" component is apportioned to classes based on the Peak Day factor (Factor 210 in QGC's cost-of-service study).
[2] See, for example, the discussion of the Average and Peak Demand Method in the NARUC Gas Distribution Rate Design Manual (June 1989), pp.27-28. The Manual specifies that the system's load factor is used to determine the capacity costs associated with average use, and apportioned to classes on an annual volumetric basis.
[3] See QGC's response to UAE 2.03, attachment.

A. Yes, for consistency I have applied my recommended weighting to the allocation of revenue credits from the FT-1 Lakeside rate (FT-1L), as well as the gradualism adjustment. The gradualism adjustment is used to allocate the unrecovered portion of costs that would otherwise be assigned to the firm transportation bypass rate class (FT-1), which is not based on cost of service and is set to recover 50% of its full revenue requirement. These are instances where QGC applied its 60% peak/ 40% throughput weighting, so I have applied my recommended weighting instead.

Q. Did you make any other changes to the cost-of-service model you prepared?

A. Yes. UAE/Nucor witness Kevin C. Higgins is recommending that the Commission reject QGC's proposed new criteria for the firm transportation bypass rate, FT-1. In QGC's cost-of-service study, several existing FT-1 customers are moved from the FT-1 class to the TS class. As UAE and Nucor are opposing the new criteria, I have kept these existing FT-1 customers in the FT-1 rate class.

RATE SPREAD

Q. What increase is QGC requesting in its Distribution Non-Gas (DNG) revenues?

A. As shown on QGC Exhibit 3.2, QGC is requesting a revenue increase of $18,962,150 in its DNG revenues.

Q. Have you reviewed QGC's proposed rate spread associated this requested DNG revenue increase?

A. Yes. Table 1 below summarizes both the cost-based DNG revenue increase required for each rate class to reach full cost of service, based on QGC's cost-of-service study, and QGC's proposed DNG revenue increase for each rate class.

Table 1

DNG Revenue Increase Required to Achieve QGC's As-Filed Cost of Service and QGC Proposed DNG Revenue Spread at its Requested Increase

Class	Current DNG Revenues	DNG Revenue Increase Required to Achieve QGC's Filed Cost-of-Service ($)	DNG Revenue Increase Required to Achieve QGC's Filed Cost-of-Service (%)	QGC Proposed DNG Revenue Increase ($)	QGC Proposed DNG Revenue Increase (%)
GS	$ 270,948,319	$ 10,246,249	3.8%	$ 12,020,552	4.4%
FS	3,578,143	86,998	2.4%	148,441	4.1%
IS	820,693	312,181	38.0%	327,898	40.0%
TS	10,790,569	5,091,162	47.2%	5,391,555	50.0%
FT-1	1,470,474	2,690,315	183.0%	531,766	36.2%
FT-1L	3,155,877	NA		0	0.0%
NGV	3,632,517	535,244	14.7%	541,938	14.9%
Total	$ 294,396,591	$ 18,962,150	6.4%	$ 18,962,150	6.4%

In essence, under QGC's proposal, each rate class is moved to QGC's proposed full cost of service, except for FT-1. FT-1 is a firm transportation rate schedule that is charged less than its fully allocated cost of service and is intended to provide an incentive for these customers to remain on QGC's distribution system, thus reducing the likelihood that these customers will connect directly to an interstate pipeline and bypass the QGC system. In this case, QGC has set the

revenues for this class at 50% of its full cost of service. Each of the other rate classes (excluding FT-1L) picks up a share of the DNG revenue shortfall from the FT-1 rate class in addition to each class's full cost of service revenue.

Q. What is your assessment of QGC's proposed spread?

A. I do not believe QGC's proposed rate spread is reasonable. As shown in Table 1, QGC's proposed IS, TS, and FT-1 revenue increases are over 500% of the overall system average. Absent some compelling public policy rationale, such dramatic increases should be avoided in a single rate case.

Q. Have you prepared an alternative rate spread recommendation?

A. Yes. Table 2 below summarizes both the cost-based DNG revenue increase required for each rate class to reach full cost of service under my study and my proposed DNG revenue increase for each rate class. My recommended rate spread is presented in UAE/Nucor Exhibit 2.1.

Table 2

UAE/Nucor Recommended DNG Revenue Spread at QGC's Requested Increase

Class	Current DNG Revenues	DNG Revenue Increase Required to Achieve NARUC Manual 67%/33% Peak & Average Cost-of-Service Method With Existing FT-1 Criteria ($)	DNG Revenue Increase Required to Achieve NARUC Manual 67%/33% Peak & Average Cost-of-Service Method With Existing FT-1 Criteria (%)	UAE Recommended DNG Revenue Increase ($)	UAE Recommended DNG Revenue Increase (%)
GS	$ 270,948,319	$ 11,068,328	4.1%	$ 16,601,166	6.1%
FS	3,578,143	6,652	0.2%	148,520	4.2%
IS	820,693	187,161	22.8%	105,722	12.9%
TS	10,790,569	2,854,357	26.5%	1,390,046	12.9%
FT-1	1,470,474	4,330,489	294.5%	189,427	12.9%
FT-1L	3,155,877	NA		0	0.0%
NGV	3,632,517	515,164	14.2%	527,270	14.5%
Total	$ 294,396,591	$ 18,962,150	6.4%	$ 18,962,150	6.4%

Q. Can you describe the approach you used to derive your recommended revenue increase at QGC's proposed revenue requirement?

A. Yes. QGC's cost-of-service study (including my recommended changes) provided general guidance for my rate spread determination. However, under certain circumstances, cost-of-service study results should yield to other ratemaking principles, such as the principle of gradualism. Gradualism takes into consideration the impact of rate increases on various customer groups. In this proceeding, the principle of gradualism is particularly important for customers taking service under the IS and TS Rate Schedules. I am recommending that the increases for the IS, TS, and FT-1 classes be capped at 200% of the system

average increase. I have elected to only reflect the allocated share of the FT-1 under-recovery in the proposed NGV increase. The NGV rate has been a topic of several public policy discussions. As a result, for the NGV class I have elected to maintain the proposed full cost treatment (plus its share of the FT-1 shortfall). Under my proposed rate spread, progress is made in moving classes towards their respective full cost of service while moderating the increases that each rate class receives.

RATE DESIGN

Q. Given that UAE and Nucor have recommended a lower revenue requirement than QGC as well as a different rate spread, do you have a recommendation regarding the rate design for the FT-1 rate class?

A. Yes. I recommend that QGC's proposed new firm demand charge and volumetric throughput block charges be reduced pro rata to conform to the final FT-1 revenue requirement approved in this proceeding.

Q. What is your recommended rate design for the TS rate class?

A. QGC has proposed new blocking for the TS rate class. I have no objection to the new blocking. However, I recommend a similar pro rata reduction to the firm demand charge and volumetric throughput block charges proposed by QGC to conform to the final TS revenue requirement approved in this proceeding.

INTERRUPTIBLE GAS SUPPLY CALL OPTION

Q. Does QGC have the right to purchase interrupted volumes from interruptible customers?

A. Yes, under Section 5.04 of QGC's tariff (to which QGC has not proposed any changes), Interruptible Transportation Service customers must, as a condition of service, offer to sell their gas supplies to the Company for the benefit of the Company and its firm sales customers during periods of interruption. Note that the requirement to offer to resell one's gas supply to QGC is distinct from the requirement to interrupt.

Q. Have circumstances changed which warrant a reexamination of this tariff provision?

A. Yes. In this case, unlike prior cases, QGC has not included any value in its cost-of-service study to TS (and IS) customers for QGC's right to purchase interrupted volumes (i.e. the call option value). While interruptible customers would still be compensated for the value of gas taken by QGC (based on a market index price), QGC's cost-of-service study no longer provides any value whatsoever for its *right* to purchase these volumes. QGC thus proposes to retain its call option on natural gas supplies of interruptible customers without recognizing any value for the call option in the cost-of-service study.

Q. Did QGC provide any direct testimony in this case addressing the elimination of this valuation in the cost-of-service study?

A. No.

Q. Has QGC elsewhere provided an explanation for the elimination of the call option value?

A. Yes. In response to discovery, QGC explained that it decided to eliminate the call option value from the cost-of-service study because if interrupted volumes were not available for resale, the Company would rely on spot purchases, instead of peaking contracts, to obtain the needed gas supply.[4] Therefore, QGC asserts, firm customers would not receive value from avoided demand charges, since spot purchases do not include demand charges.

Q. Did you participate in the gas cost-of-service proceeding, Docket No. 10-057-12?

A. Yes, I did.

Q. Was elimination of the call option credit an issue that was vetted during those workshop discussions?

A. Not to my knowledge. In fact, the cost-of-service model used for workshop discussions included this credit.

Q. How has the value of QGC's right to acquire the gas supplies of interruptible customers been reflected in the past?

A. The Cost of Service and Rate Design Task Force, which studied this issue as a result of the Commission's final order in the 2002 rate case[5], agreed that the value of the peaking gas made available during interruptions should be recognized in QGC's class cost-of-service study, and a provision to do so was incorporated in

[4] See QGC's response to UAE data requests 3.01 and 3.03.
[5] Docket No. 02-057-02, Decision issued December 30, 2002, which approved (among other items) the Allocation and Rate-Design Settlement and Stipulation.

the cost-of-service model.[6] Subsequently, this provision was reflected in the Company's cost-of-service studies in the 2007 and 2009 rate cases.

Q. Does QGC rely upon the availability of Interruptible Transportation customers' gas in its planning process?

A. Yes. According to the Company's Integrated Resource Plan[7], QGC includes in its modeling process each year the availability of supplies that can be purchased from interruptible transportation customers. QGC has planned on the availability of 50,000 Dth/day of this resource in its modeling process for the current IRP year, for the months of December through February.

Q. Are there unique contract provisions to which an Interruptible Transportation customer must adhere in order to preserve the value of the call option to QGC?

A. Yes. As a condition of service, the tariff requires that an Interruptible Transportation customer's gas contract may not preclude continued deliveries by its supplier during periods of interruption, nor may it allow, during a period of interruption, for the sale, exchange, transportation, or beneficial use of Company-requested gas supplies for the benefit of anyone other than QGC or parties holding a pre-existing higher contractual priority to the gas.

Q. What is your recommendation on this issue?

A. In light of QGC's contention that the Company can readily avail itself of spot market gas during interruption periods and QGC's elimination of call option

[6] Docket No. 02-057-02, QGC COS and Rate Design Task Force Report (June 18, 2004).
[7] Questar Gas Company's Integrated Resource Plan (IRP) for Plan Year: June 1, 2013 to May 31, 2014, Docket Number: 13-057-04, Exhibit H - Purchased Gas (May 31, 2013).

valuation in its cost-of-service study, Section 5.04 of the Company's tariff, which confers the right on QGC to seize the gas supplies of interrupted customers, should be eliminated.[8] QGC apparently sees no value in the right to seize customer gas supplies, and the obligation to make those supplies available to QGC imposes restrictions and potential costs on transportation customers. Eliminating this language will relieve the interruptible customer from the obligation to deliver interrupted volumes to the QGC distribution system, providing greater contractual flexibility than possible under the current tariff. Eliminating this call option will also preclude QGC from calling on the Interruptible Transportation customer's gas supply during critical events. This is reasonable considering QGC's position that the right to seize this gas no longer holds any value, due to its ability to rely instead upon spot gas purchases.

Alternatively, if the call option remains in the tariff as proposed by QGC, then the valuation previously included in the cost-of-service must be reinstated.

Q. Have you prepared an adjustment to the Company's cost-of-service analysis to reflect the value of the call option?

A. Yes, I have. I have prepared an adjustment to account for the call option value, which I recommend be reinstated if my primary recommendation to eliminate the call option tariff provisions is not adopted.

This adjustment is shown in UAE/Nucor Exhibit 2.2, p. 1, which recognizes a call option credit of $300,997 to the TS and IS classes, to reflect the

[8] The TS Classification Provision contained in § 5.07, which states "The Company has the right to purchase interrupted volumes in accordance with the provisions of § 5.04," should also be eliminated.

value of the call option. Because QGC's overall costs are not changed by this adjustment, there must be an offsetting cost adjustment allocated to the firm sales classes that benefit from the call option, such that the net effect on QGC's overall cost-of-service is zero. This offsetting cost adjustment is allocated to the benefiting classes on the basis of firm sales. The results of the cost-of-service study incorporating this call option adjustment, as well as UAE's and Nucor's recommended weighting for Allocation Factor 230 and retention of current FT-1 criteria, are summarized in UAE/Nucor Exhibit 2.2, p. 2.

Q. Does this conclude your direct testimony?

A. Yes, it does.